### **Caring For Photographs: Special Formats**

Museum, archival and manuscript collections include photographs. Photographs include photographic prints, slides, negatives, and transparencies in thousands of processes, formats, and genres. This *Conserve O Gram* provides guidelines for caring for the most common of these special formats such as cased images, glass plates, card-mounted images, and over or undersized images.

## To Preserve Your Photographs You Must **Do This...**

## Housing and Storing Cased Images (Ambrotypes, Daguerreotypes, Tintypes)

- Store cased images, such as ambrotypes, daguerreotypes, and tintypes at 18-20°C (65-68°F) and 40-50% RH.
- Use the time-based monitoring system to help you select the best storage space. See the second Reilly report in *References*.
- Dust the case lightly with a soft, clean brush, but don't touch the image surface. Clean the brush regularly by wiping on a clean damp cloth, then a clean dry cloth.
- House cased images in small four-flap boxes made of acid-free, alum-rosin-free, and lignin-free, high alpha-cellulose (>87%) board with a neutral pH. All storage materials for all photographs, regardless of type, must pass the Photographic Activity Test (PAT). *Conserve O Gram* 14/2 discusses the PAT.
- Place photographic prints or xerographic copies of the images on the outsides of the boxes using acrylic adhesive to aid in locating images without opening the containers.
- Use separation sheets and copy images when removing cased images from collections for special storage.
- Store the boxed images flat, by size in larger boxes or padded drawers; or vertically in padded boxes or drawers.

### Don't Do This...

- Don't store cased images at <40% RH as they may crack or become warped or embrittled or >50% RH as brass mats may corrode and their cover glasses may deteriorate.
- Don't place ambrotypes, daguerreotypes, or tintypes with flaking binders in plastic sleeves or in cold storage.
- Don't brush the surfaces of cases made of flaking leather or thermoplastic.
- Don't use leather dressings, plastic coatings, or treatments on cases.

#### To Preserve Your Photographs You Must Don't Do This... Do This... Handling Cased Images (Ambrotypes, Daguerreotypes, Tintypes) Don't disassemble a cased image. • Wear clean lint-free cotton or latex gloves. Don't force hinges of cased images • Work over an uncluttered, clean, and padded surface. all the way open or tightly closed. • Ensure that security is tight as these images are easily stolen Don't force warped cases to close. and have high market value. Don't try to remove or clean the • Avoid using the case's metal clasps to close it as this may cover glass without a conservator. damage the case. • For reformatting cased images, see Reformatting Card-Mounted Images below for guidance. Housing and Storing Images Mounted on Card Stock (Cartes de Visite, Cabinet Cards, Sports Cards, and Don't force curved card-mounted Stereographs) images flat, instead house them upright on their long edge in archival • Store images in archival four-flap envelopes within folders, boxes. either upright on their long edge or flat within shallow Don't remove images from historic archival print boxes. albums or scrapbooks, instead • Follow standard print storage environmental guidelines. stabilize and box the album. • House tissue stereographs (stereo transparencies on thin Don't try to remove prints from their translucent tissue paper sometimes called French tissues) flat acidic mounts, instead house them in within four-flap envelopes in shallow print boxes. acid-free four-flap sleeves. • Use archival storage boxes, not historic wood-frame slotted Don't yank unmounted images from stereograph storage boxes, to house stereographs. plastic sleeves, instead slit the sleeve Keep images in their original historic albums except when at the edge and pull it gently away advised otherwise by a conservator. Then use a separation from the images. sheet to maintain the provenance and original order. Handling Images Mounted on Card Stock (Cartes de Visite, Cabinet Cards, Sports Cards, and Stereographs) Don't flatten stereographs, as the curve may be part of the illusion. • Avoid using rusty, damaged, dirty, or warped stereoscopic Don't remove mounted images from viewers to view stereographs. acidic backings, instead place a sheet Handle tissue stereographs only when they are supported by of buffered board behind them. a stiff piece of neutral pH board or similar support. Don't view ripped, torn, or cracked • Follow guidelines described for most photographs in images, instead use copies. Conserve O Gram 14/4. Reformatting Card-Mounted Images (Cartes de Visite, Cabinet Cards, Sports Cards, and Stereographs) Don't reformat your card-mounted • Prepare the rehoused card-mounted image for reformatting images if they have flaking emulsions via the interpositive process, followed by copy inspection or are ripped. Have them stabilized and final cold storage of the originals. by a conservator first. Minimize the number of times and length of time that an Don't give your reformatting original image must be removed from cold storage by contractor materials to copy until you inspecting copy work immediately upon return and never provide instruction on how to handle using originals for reference or duplication after copying. them.

## To Preserve Your Photographs You Must **Do This...**

### Housing and Storing Glass Plate Negatives and Transparencies (Magic Lantern Slides, Collodion Wet Plates, Collodion Dry Plates, Silver Gelatin Wet and Dry Plates)

- Store glass plates in cool dark storage at  $18^{\circ}$ C (65°F)  $\pm 2^{\circ}$ , 30-40% RH  $\pm 5\%$ .
- Keep light levels at <50 Lux (5 footcandles) when in use.
- House glass plate negatives and transparencies upright vertically on their long edge in neutral pH four-fold sleeves within archival (non-wooden) boxes on archival shelving.
- House cracked, flaking, or broken glass plates flat in sink
  mounts made out of appropriate archival materials. Sink
  mounts are described in NPS Museum Handbook, Part I,
  Appendix R. Use archival board scraps to keep glass pieces
  from touching.
- Select housing materials that don't require slipping items in and out of sleeves, such as four-flap enclosures.
- Use only paper/board housing that is unbuffered, unprinted, neutral pH, alum-rosin-free, lignin-free, high alpha-cellulose (>87%) paper that passes the PAT test.
- Label each envelope before placing the image inside. Label storage boxes *Heavy! Fragile Glass!*
- Use padded boxes and have protective slots and stiff neutral pH corrugated board dividers every 5-7 images.

### Handling Glass Plate Negatives and Transparencies (Magic Lantern Slides, Collodion Wet Plates, Collodion Dry Plates, Silver Gelatin Wet and Dry Plates)

- Wear latex or cotton gloves when working with glass plates.
- Work with glass plates only on clean padded work spaces.
- Train staff to support glass plates by holding them on diagonally-opposite corners with both hands.
- After viewing a glass plate, return it immediately to its padded storage box. Avoid touching two plates together.
- Handle glass plates with extreme caution, particularly in a disaster response situation. When wet, glass plates are particularly vulnerable to damage from mishandling.

# Reformatting Glass Plate Negatives and Transparencies (Magic Lantern Slides, Collodion Wet Plates, Collodion Dry Plates, Silver Gelatin Wet and Dry Plates)

- Reformat glass plates after stabilization following guidance in *Conserve O Grams* 19/10, 19/11, 19/12, and 19/13.
- Train duplication firms how to handle, rehouse, and deliver glass plates. Write these procedures into your contract.
- Tell your contractor *not* to place your glass plates in plastic sleeves for return to you.

### Don't Do This...

- Don't store glass plates flat, stacked, or in plastic sleeves or wooden boxes
- Don't store glass plates on mobile shelving.
- Don't throw out broken glass plates, as they may be repaired and copied.
- Don't allow <30% RH or the image-bearing layer may flake off.
- Don't allow >40% RH or the glass may corrode, the image may deteriorate or mold, and the varnish may flake.
- Don't use slotted wooden storage boxes, instead use slotted archivalquality board boxes.

- Don't use original glass plates for reference or duplication.
- Don't handle broken or cracked glass plates. Get them stabilized first.
- Don't stack glass plates (or their boxes) or allow two plates to touch each other as this causes a bruise.
- Don't ship glass plates through the mail, instead hand deliver them.
- Don't reformat your glass plates if they are cracked, broken, or have flaking emulsions; have them stabilized by a conservator first.
- Don't give reformatting contractors glass plates to copy until you are certain they understand how to handle and deliver them to you.

## To Preserve Your Photographs You Must **Do This...**

### Housing and Storing Oversize Photographs

- Keep light levels < 50 Lux (5 footcandles) as cyanotypes, blueprints, and color images are particularly prone to fading.
- Keep the storage and work environments at <20°C (68°F)  $\pm 2$ ° and 30-50% RH  $\pm 3$ % RH.
- Store oversize photographs, such as panorama prints or cyanotypes, *flat* within individual neutral pH lignin-free board folders or mats labeled with their contents or in polyester L-weld folders with a sheet of neutral pH backing board behind them.
- Place the matted or foldered items in mapcase drawers or solander boxes on shelves.
- Place the labelled spine of the folder towards the front of the drawer or box to discourage inappropriate handling.

### Don't Do This...

- Don't store oversized photographs folded, rolled, or bent unless recommended by a conservator.
- Don't trim photographs, even if the backing material is acidic.
- Don't be afraid to use neutral pH board or polyester folders for oversize photos as long as the images don't have flaking image layers or friable (smearable) media. Weak oversize items require support such as foldering.
- Don't use plastic housing if your humidity ever is >70% RH.

### Handling Oversize Photographs

- Wear clean latex or cotton gloves.
- Remove photographs from their container (for example, mapcases or folders) for viewing, rather than folding back surrounding items.
- Keep images in their boxes except when viewing them.
- Move oversize images on a flat stiff board support or book truck. Use two people to carry oversize materials.
- Don't riffle through photos or bend or fold items back in order to view other materials in a box or mapcase.
- Don't carry oversized photographs in a rolled, folded, or bent manner.

### Reformatting of Oversize Photographs

- Reformat oversize images to facilitate access. See *Reformatting Card-Mounted Images* above.
- Train duplication firms how to handle, rehouse, and deliver oversize images. Write these procedures into your contract.
- Tell your contractor not to place your oversize images automatically in plastic or buffered materials.

 Don't automatically reformat every oversize image unless it has high value, use, and risk. See Conserve O Gram 19/10.

For additional guidance on photographs see *Conserve O Grams* 14/1, 14/2, 14/3, and 14/4, and NPS *Museum Handbook*, Part I, Appendix R. For sources of archival-quality materials, see *Conserve O Gram* 14/4

### References

Reilly, James. Care and Identification of 19th Century Photographic Prints. Rochester, NY: Eastman Kodak, 1986.

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